# DOT Monitoring Program For Portland Cement Concrete Paving Plant Inspection

# Plant Inspection Duties Per IM 214 213 and IM 527

# Minimum Monitoring Requirements by Construction Personnel

### **Stockpiles**

- 1. Proper stockpiling procedures
- 2. Prevention of intermingling of aggregates
- 3. Prevention of contamination
- 4. Prevention of segregation

Inspect before production starts and weekly thereafter

### **Plant Facilities**

- 1. Assures plant safety
- 2. Check for equipment compliance
- 3. Proper laboratory location and facilities

Inspect before calibration. (Check that plant inspector has the proper batch weight tables, current manuals, instructions, and specifications. Inspect transit mixers.)

#### Calibration

- 1. Be present during calibration
- 2. Have appropriate batch weights

Plant calibration is observed by District Materials personnel and plant monitor.

# Cement, Fly Ash, and Aggregate Delivery and Admixtures

- Check for proper source and certification
- 2. Document quantities delivered
- 3. Monitor condition of shipments

Audit before production starts and weekly thereafter.

### **Plant Sampling**

- 1. Check aggregate gradations
- 2. Check aggregate moisture
- 3. Check aggregate specific gravity

1. Witness sampling and splitting of at least one of the first three samples of each aggregate and a minimum of 10% of the remaining samples. Provide documentation of these witnessed samples on Form 820193. Perform acceptance testing frequency as per I.M. 204. Also verify that the sampling and testing plan is in compliance with Construction Manual 3.22

The frequency of monitoring or correlation gradation testing shall be as follows: On the first day of work, test the split samples of each aggregate tested for process control on each project. Test at least 10% of the split samples thereafter.

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2 & 3. Witness once during first week of production. If problems develop, run one test to verify the plant inspector's results.

# DOT Monitoring Program For Portland Cement Concrete Paving Plant Inspection (Continued)

## Plant Inspection Duties Per IM <mark>214 213</mark> and IM 527

# Minimum Monitoring Requirements by Construction Personnel

## **Proportion Control**

- Check scale weights and scale operation
- 2. Check admixture dispensers
- 3. Check mixing time and revolutions
- 4. Check cement yield

## **Concrete Tests**

- 1. Cure flexural test specimens
- 2. Test flexural specimens
- 3. Develop Maturity Curve

### **Test Equipment**

 Clean and maintain scales, screens, pycnometers, beam molds, and laboratory facility 1. Observe curing facility weekly

Audit and/or observe weekly

- 2. Observe one beam break weekly
- 3. Check Maturity Curve development

## Examine weekly

### **Documentation**

- 1. Prepare daily plant reports
- Document all checks and test results in field book
- 3. Maintain daily diary of work activities
- Audit daily
- 2. & 3.Audit weekly
  Separate diary to be maintained on items monitored

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